are not associated with the neurological and immunological abnormalities found in myalgic encephalomyelitis.

Does the distinction between the chronic fatigue syndrome and myalgic encephalomyelitis matter? It depends. According to recent research, treatments such as graded exercise which are helpful for the chronic fatigue syndrome do not generally benefit those with myalgic encephalomyelitis.[5] On the other hand, combining all the fatigue syndromes together, implying that they share a common aetiology, and treating them in the same way would probably save the NHS and Medical Research Council some much needed money.

At the moment the confusion between the chronic fatigue syndrome and myalgic encephalomyelitis makes it extremely difficult to interpret research and evaluate clinical trials. Unfortunately, if authors of editorials do not start to distinguish between myalgic encephalomyelitis and the other fatigue syndromes this is unlikely to improve.

ELLEN M GOUDSMIT
Director

Information Unit,
International Federation of ME Associations,
Teddington,
Middlesex TW11 9QX

1 Delamothe T. Look at ME. *BMJ* 1994;**308**:798. (19 March.)
2 Wilson A, Hickie I, Lloyd A, Hadzi-Pavlovic D, Boughton C, Dwyer J, *et al.* Longitudinal study of the outcome of chronic fatigue syndrome. *BMJ* 1994;**308**:756-9. (19 March.)
3 MacDonald EM, David AS, Pelosi AJ, Mann AH. Chronic fatigue in primary care attenders. *Psychol Med* 1993;**23**:987-98.
4 Ho-Yen DO. *Better recovery from vital illnesses.* 3rd ed. Inverness: Dodona Books, 1993.
5 Goudsmit EM, Shepherd C. Chronic fatigue syndrome. *Br J Psychiatry* 1992;**160**:126-7.

. . . and study them separately

EDITOR,—The struggle over myalgic encephalomyelitis and the chronic fatigue syndrome is not, as S M Lawrie and A J Pelosi suggest, whether they are physical or mental illnesses.[1] Both sides in this debate accept that most illnesses combine organic and psychological factors. The struggle is about methodology and definition and, in particular, how different methodologies and definitions inevitably lead to different findings on the degree to which depression is a perpetuating agent in these conditions.

One side favours studying the chronic fatigue syndrome as a single entity, arguing that there is insufficient knowledge at present to differentiate between different chronic fatigue syndromes. This side prefers Sharpe *et al*'s broad definition of the syndrome, which includes depressive illness, anxiety disorders, and the hyperventilation syndrome.[2] Unsurprisingly, studies that use these criteria find higher levels of depression (or "psychosocial disorders"—yet another woolly term).

The other side argues that there is sufficient knowledge to distinguish specific chronic fatigue syndromes, particularly the much studied myalgic encephalomyelitis, and that it must be better science in these cases to study such syndromes in their own right. Furthermore, it argues that the study groups used in research based on broadbrush criteria will have been so aetiologically heterogeneous as to invalidate the findings. This side, which includes the national patient organisations, equates myalgic encephalomyelitis with Holmes *et al*'s tighter definition of the chronic fatigue syndrome, which focuses more on organic symptoms and, again unsurprisingly, finds lower levels of depression similar to those found in patients with cancer and multiple sclerosis—that is, the levels that might be predicted in any chronic illness.[3]

Until the various chronic fatigue syndromes are each studied in their own right rather than as one huge "dustbin" syndrome we shall make little progress. Findings from research studies that are allegedly of the chronic fatigue syndrome but that use study groups that are not comparable and different methods of assessing depression will continue to contradict each other. It is essential that all studies on the chronic fatigue syndrome specify both the criteria used to select the study groups and the measure(s) and cut off points used for assessing depression so that their importance and relevance to other studies of the syndrome may be assessed.

NICK ANDERSON
Director

Action for ME,
PO Box 1302,
Wells BA5 2WE

1 Lawrie SM, Pelosi AJ. Chronic fatigue syndrome: prevalence and outcome. *BMJ* 1994;**308**:732-3. (19 March.)
2 Sharpe MC, Archard LC, Bonatvala JE, Borysiewicz LK, Clare AW, David A, *et al.* A report—chronic fatigue syndrome: guidelines for research. *J R Soc Med* 1991;**84**:118-21.
3 Holmes GP, Kaplan JE, Gantz NM, Kormaroff AL, Schonberger LB, Straus SE, *et al.* Chronic fatigue syndrome: a working case definition. *Ann Intern Med* 1988;**108**:387-9.

Preliminary report misrepresented

EDITOR,—We wish to point out an inaccuracy in Tony Delamothe's review of *ME/PVFS and the Press.*[1] Delamothe dismissively describes the preliminary report—initially published from our centre as a letter outlining an interesting observation on cerebral hypoperfusion specifically to the brain stem region of patients with myalgic encephalomyelitis[2]—as not worthy of carrying equal weight with every other publication as no further details have been forthcoming since and it was only a 250 word letter. Firstly, further details of the findings were published as abstracts of presentations (refereed) to scientific societies in two specialist journals of nuclear medicine at the same time,[3,4] giving the report the status of more than merely a letter.

The main reason why no more has been forthcoming from our research group is that the group awaited the arrival of a psychiatrist (CT) to join the team that performed the pilot study. He has since been carrying out psychiatric evaluation and using operational criteria for the chronic fatigue syndrome of the Centers for Disease Control as well as the Oxford criteria used in the original pilot study. It was also desirable to establish the presence or absence of psychiatric illness and personality disorder during each patient's lifetime for the purposes of further analysis. We have just published findings in an enlarged cohort,[5] and have another item in press,[6] in refereed abstracts. Furthermore, we will soon be submitting a larger and more detailed full paper outlining our methods and findings to the general medical press.

No workers doing research into the chronic fatigue syndrome would dispute the strong association between psychiatric morbidity and the syndrome or even the more controversial, narrowly defined myalgic encephalomyelitis. Our findings, however, show clear differences in brain stem perfusion between patients with myalgic encephalomyelitis or the chronic fatigue syndrome, particularly those who have not had any major psychiatric illness during their lifetime, and depressed controls, strongly suggestive of an abnormality that can be shown objectively with single photon emission tomography. We believe that the sterile debate between psychological and physical models is unnecessary and that a multifactorial approach taking into account a biopsychosocial model is called for.

CHARLES TANNOCK
Senior registrar in psychiatry
DURVAL CAMPOS COSTA
Senior lecturer in nuclear medicine
JONATHAN BROSTOFF
Reader in clinical immunology

University College Hospital,
London WC1E 6AU

1 Delamothe J. Look at ME. *BMJ* 1994;**308**:798. (19 March.)
2 Costa DC, Brostoff J, Douli V, Ell PJ. Postviral fatigue syndrome. *BMJ* 1992;**304**:1567.
3 Douli V, Ell PJ, Costa DC, Kouris B. CBF/SPET in patients with myalgic encephalomyelitis. *Nucl Med Commun* 1992;**13**:222.
4 Costa DC, Brostoff J, Douli V, Ell PJ. Brain stem hypoperfusion in patients with myalgic encephalomyelitis—chronic fatigue syndrome. *Eur J Nucl Med* 1992;**198**:733.
5 Costa DC, Gacinovic S, Tannock C, Brostoff J. Brain stem SPET studies in normals, ME/CFS and depression. *Nucl Med Commun* 1994;**15**:252-3.
6 Costa DC, Tannock C, Greco A, Gacinovic S, Brostoff J. Myalgic encephalomyelitis—chronic fatigue syndrome (ME/CFS): brain stem SPECT and MRI evaluation. *J Nucl Med* (in press).

The week in which he wrote "Look at ME" Tony Delamothe contacted Durval Costa, who said that no full paper reporting the study mentioned in his letter to the *BMJ* (1992;304**: 1567) had been published or submitted for publication.

Self help groups give valuable support

EDITOR,—Tony Delamothe's article on myalgic encephalomyelitis was refreshingly objective,[1] but this cannot be said of S M Lawrie and A J Pelosi's editorial.[2] Delamothe questions whether "medical journals keep doctors in the dark."[1] We believe that the editorial was not even handed.

Within two weeks of publication of the article and editorial our paper on self help groups was published.[3] Lawrie and Pelosi's editorial stated, "if an illness is attributed entirely to external sources there will be little scope for self help."[2] Our results were quite different. The Moray Firth myalgic encephalomyelitis self help group has existed for the past seven years and has had one coordinator (AG). A representative sample of members was surveyed by questionnaire in 1988, 1989, and 1992; response rates were 44/53 (83%), 19/34 (56%), and 42/49 (86%) respectively. The results (table) contradict the statement in the editorial.

Replies to postal questionnaire sent to members of myalgic encephalomyelitis self help group. Figures are numbers (percentages) of responses

	1988 (n=44)	1989 (n=19)	1992 (n=42)
Referred to group by doctor	8 (18)	4 (21)	4 (10)
Information helpful	43 (98)	18 (95)	37 (88)
Information helped patient to talk to doctor	33 (75)	7 (37)	15 (36)
Helpful to know others with same illness	41 (93)	16 (84)	35 (83)
Patient reassured	37 (84)	17 (89)	30 (71)
Illness management helped by group	32 (73)	16 (84)	30 (71)
Attend meetings	31 (70)	14 (74)	27 (64)
Group should provide:			
Information	36 (82)	11 (58)	29 (69)
Support	4 (9)	5 (26)	4 (10)
Social activities	1 (2)		4 (10)
Raising money for research important	26 (59)	12 (63)	29 (69)

Why is there this discrepancy? The answer is simple: irrespective of the cause of their illness, patients require support. This can be provided by the doctor but is probably best provided by the doctor and a self help group, a combination that has been found useful in other illnesses, such as diabetes and multiple sclerosis.

Delamothe states, "only doctors now remain sceptical about the condition and wary of accepting 'encephalomyelitis.'"[1] We believe that this may be true for the rest of Britain, but in the highlands of Scotland 71% of general practitioners accept the existence of myalgic encephalomyelitis.[4] Our example shows that doctors are being given different advice.[2,3] Now is the time to be objective and

recognise that patients can be satisfied with self help groups.

D O HO-YEN
Consultant microbiologist

Microbiology Department,
Raigmore Hospital,
Inverness IV2 3UJ

A GRANT
Coordinator

Moray Firth ME Group,
Elgin IV30 3UE

1 Delamothe T. Look at ME. *BMJ* 1994;**308**:798. (19 March.)
2 Lawrie SM, Pelosi AJ. Chronic fatigue syndrome: prevalence and outcome. *BMJ* 1994;**308**:732-3. (19 March.)
3 Ho-Yen DO, Grant A. GPs despise the ME generation. *General Practitioner* 1 Apr 1994:46.
4 Ho-Yen DO, McNamara I. General practitioners' experience of the chronic fatigue syndrome. *Br J Gen Pract* 1991;**41**:324-6.

Prevalence study overlooked

EDITOR,—It is sad that, in an issue in which Tony Delamothe considers biased reporting of the chronic fatigue syndrome,[1] S M Lawrie and A J Pelosi's editorial on the subject should be so one sided.[2] The editorial's title mentions the prevalence of the chronic fatigue syndrome, but the editorial fails to mention the most complete British study.[3] In this study all general practices in two health boards were circulated with a questionnaire. There was a 91% response rate, with most respondents (71%) accepting the existence of the chronic fatigue syndrome when a strict definition was used.[4] The doctors reported a prevalence among their patients of 1·3/1000 patients (range 0·3-2/1000 for the 10 areas surveyed). The higher prevalences were found in more populated areas.

We recently finished a community survey of psychiatric disorder in patients with the chronic fatigue syndrome. The editorial states that "the closer cases fulfil the definition of chronic fatigue syndrome the stronger the association with emotional morbidity."[2] Our study used a strict definition of the syndrome.[4] All 65 patients had a psychiatric assessment, which was done with the schedule for affective disorders and schizophrenia, general health questionnaire, hospital anxiety and depression scales, and follow up interviews and by report from relatives and friends.

On the basis of the psychiatric assessment patients were placed in four groups: no psychiatric disorder (36 patients), psychiatric disorder before onset of the chronic fatigue syndrome (seven), psychiatric disorder coincident with the syndrome (11), and psychiatric disorder after the syndrome (11). The prevalence of psychiatric disorder (45%) is close to that found in studies of patients with other medical conditions. This is quite different from stating that three quarters of hospital patients with the chronic fatigue syndrome have an associated psychiatric illness.[5] We believe that the prevalence of psychiatric disorder was lower in our study because we studied patients in the community who had become ill more recently than those in other studies.

D O HO-YEN
Consultant microbiologist

Microbiology Department,
Raigmore Hospital,
Inverness IV2 3UJ

M SHANKS
Consultant psychiatrist

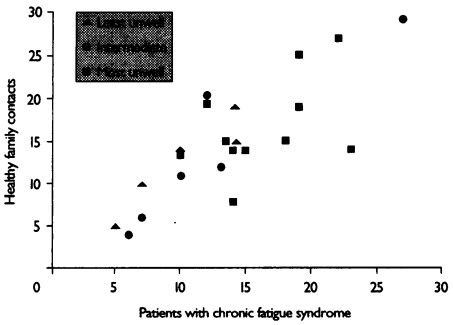
Craig Dunain Hospital,
Inverness

1 Delamothe T. Look at ME. *BMJ* 1994;**308**:798. (19 March.)
2 Lawrie SM, Pelosi AJ. Chronic fatigue syndrome: prevalence and outcome. *BMJ* 1994;**308**:732-3. (19 March.)
3 Ho-Yen DO, McNamara I. General practitioners' experience of the chronic fatigue syndrome. *Br J Gen Pract* 1991;**41**:324-6.
4 Ho-Yen DO. Patient management of post viral fatigue syndrome. *Br J Gen Pract* 1990;**40**:37-9.
5 David AS, Wessely S. Chronic fatigue syndrome: signs of a new approach. *Br J Hosp Med* 1991;**45**:158-63.

*D O Ho-Yen's research was supported by the Moray Firth myalgic encephalomyelitis self help group.

Immunological findings may vary between populations

EDITOR,—We were interested in Andrew Wilson and colleagues' paper investigating predictors of the long term outcome of the chronic fatigue syndrome in patients in Australia.[1] We have investigated the association between immune activation[2] and presumed cutaneous anergy[3] in 68 Scottish patients with the syndrome (19 cases conformed to the Centers for Disease Control's criteria, 18 cases had been diagnosed by a consultant, 28 cases had been diagnosed by a general practitioner, and three patients referred themselves) and 22 family contacts. We assessed delayed hypersensitivity responses (using Multitest antigens and tuberculin skin tests) and evaluated peripheral blood activation markers (CD8, CD38/CD11b/HLA-DR) using flow cytometry. Patients were classified into three groups on the basis of current severity of illness and mobility.



Relation between CD8, CD38 activation markers (expressed as percentage of total lymphocyte population) in peripheral blood of patients with chronic fatigue syndrome and family contacts

In our patients anergy shown by the Multitest (defined in the same manner as Wilson and colleagues defined it) and by the tuberculin skin test was not a prominent feature in any of the groups of subjects, including the most unwell. The most unwell, however, exhibited appreciably higher levels of CD8, CD38 T cells than the other groups of patients. In the 65 patients fit enough to have the Multitest anergic, hypoanergic, and normal responses were shown by 3% (n=2), 25% (16), and 72% (47) of patients respectively. This compares with 6% (1), 39% (7), and 56% (10) respectively of the 18 family contacts tested and with 7% (1), 20% (3), and 73% (11) of 15 healthy people who were not contacts. The rate of positive responses to the tuberculin skin test was as high in the patients with the chronic fatigue syndrome (79% (51/65)) as in household contacts (83 (15/18)), and these positive responses showed conventional hyperaemic and gas transport changes.[4]

In view of these findings, cutaneous anergy must not be viewed as a conspicuous feature of Scottish patients with the chronic fatigue syndrome. In addition, our finding of "hypoanergy" (2-4 mm induration in women, 2-9 mm induration in men[1]) in control groups suggests differences in immunisation or exposure to antigens between this healthy population and those in the United States or Australia. Perhaps "normal" ranges for responses to the Multitest should be defined locally to aid the assessment of delayed hypersensitivity responses in patients.

Our most unexpected finding was a positive relation ($r=0·78$, $P<0·00002$) between CD38 activation markers in patients and their close family contacts (figure). These pairs were not consanguineous (17 spouses, five other family members), and this relation could have an environmental basis. In view of the association of these markers with progression of HIV infection,[5] however, they may also have potential in predicting outcome in patients with the chronic fatigue syndrome.

This work was funded by the Chief Scientist Organisation of the Scottish Home and Health Department.

NEIL C ABBOT
Postdoctoral research assistant

Institute of Physiology,
University of Glasgow,
Glasgow G12 8QQ

VANCE A SPENCE
Principal physicist

J GRAHAM LOWE
Consultant dermatologist

ROBERT C POTTS
Senior chief medical laboratory scientific officer

AHMED H A HASSAN
Research assistant

JILL J F BELCH
Reader in medicine

Ninewells Hospital,
Dundee DD1 9SY

JOHN SWANSON BECK
Dean

International Medical College,
Kuala Lumpur,
Malaysia

1 Wilson A, Hickie I, Lloyd A, Hadzi-Pavlovic D, Boughton C, Dwyer J, *et al.* Longitudinal study of outcome of chronic fatigue syndrome. *BMJ* 1994;**308**:756-9. (19 March.)
2 Levy JA, Jessop C, Landay AL, Lennette E. Chronic fatigue syndrome: is it a state of chronic immune activation against an infectious virus? In: Root RK, Sande MA, eds. *Contemporary issues in infectious diseases.* Vol 10. New York: Churchill Livingstone, 1993.
3 Lloyd A, Hickie I, Hickie C, Dwyer J, Wakefield D. Cell-mediated immunity in patients with chronic fatigue syndrome, healthy control subjects and patients with major depression. *Clin Exp Immunol* 1992;**87**:76-9.
4 Abbot NC, Beck JS, Carnochan FM, Lowe JG, Gibbs JH. Circulatory adaptation to the increased metabolism in the skin at the site of the tuberculin reaction. *Int J Microcirc Clin Exp* 1992;**11**:383-401.
5 Levacher M, Hulstaert F, Tallet S, Ullery S, Pocidalo JJ, Bach BA. The significance of activation markers on CD8 lymphocytes in human immunodeficiency syndrome: staging and prognostic value. *Clin Exp Immunol* 1992;**90**:376-82.

Stop bickering about labels

EDITOR,—As an independent medical journalist, I was asked by Action for ME and Chronic Fatigue to report on the recent coverage of myalgic encephalomyelitis and the postviral fatigue syndrome in the medical press. I found the coverage confusing and unbalanced. I reject Tony Delamothe's assertion that my report is "best understood as part of a marketing exercise to separate myalgic encephalomyelitis from a rag bag of chronic fatigue syndromes and to 'brand' it as the one with an organic cause."[1] Other diseases within the constellation of chronic fatigue syndromes are thought to have organic causes; the postviral fatigue syndrome is probably the best accepted example. The report did point out, however, that the medical press as a whole preferred psychiatric explanations rather than organic explanations for the entity we call myalgic encephalomyelitis.

Rather than being an attempt to "censor the encephalomyelitically incorrect" the report was intended to highlight the imbalance and open the issue for debate. Delamothe accepts that it has raised questions about who writes on controversial topics for the medical press and how such information is presented. Patients with myalgic encephalomyelitis and other types of chronic fatigue are not helped by ignorance and bias. They would sooner see solutions to their disability than the current bickering about how they should be labelled.

CATHY READ
Medical journalist

Nottingham NG3

1 Delamothe T. Look at ME. *BMJ* 1994;**308**:798. (19 March.)

ME Association is honest about prognosis

EDITOR,—I wish to challenge the assertion by S M Lawrie and A J Pelosi that the prognosis given by